

ABSTRACT OF THE DISCLOSURE

Disclosed is an OFDM (orthogonal frequency division multiplexing) wireless communication system operable on a frequency selective channel, and a channel compensation method. An IDFT (inverse discrete Fourier transform) unit of a transmitter includes first through third N-point IDFT units, and performs IDFT on a binary information signal twice. A DFT (discrete Fourier transform) unit of a receiver includes first through third N-point DFT units, a channel predictor and interpolator, and a channel compensator, and performs DFT on the signal received from the transmitter twice.